

REMARKS/ARGUMENTS

Claims 3, 9 and 18 are cancelled. Claims 23 – 24 are new.

Claim 1 is supported at previously presented Claim 1, at specification page 4, lines 10-29, and at the Examples at pages 7-9. Claims 2 and 4-6 are supported at the correspondingly numbered previously presented Claims 2 and 4-6. Claim 7 is supported at previously presented Claims 1 and 7, at specification page 4, lines 10-29, and at the Examples at pages 7-9. Claims 8, 10-17, and 19-22 are supported at the correspondingly numbered previously presented Claims 8, 10-17, and 19-22. New Claims 23 and 24 are supported at specification page 5, lines 16-18.

No new matter is added.

Applicants thank Examiner Sastri for the helpful and courteous discussion of April 8, 2010, wherein the Examiner indicated that Claims 1 and 2 as amended in this paper are likely supported and address the indefiniteness rejection, and wherein the Examiner requested Applicants submit discussed superior and unexpected results for her consideration. As a courtesy to the Office, the term “said” is employed in the claims to aid in tracing antecedent basis.

The objections to Claims 1 and 2 are mooted by claim amendments. The extra incidence of “propyltrimethoxysilane” is deleted from Claim 1 and in Claim 2, the phrase “mixture the in” is amended to “mixture in.” Withdrawal of the objections is requested.

The indefiniteness rejection is traversed. Claim 1 is drawn to a polymer dispersion comprising a polymer, water and a surfactant. The polymer contains, in polymerized form, and unsaturated silane (i), an organo silane (ii), and a monomer, all of which are separately defined within Markush groups. The polymer is polymerized from a monomer solution containing defined components in described weight ratios. Claim 1 “particularly points out

and distinctly claims”¹ an inventive embodiment. The subject matter of Claim 1 is clear, and Applicants have not indicated they intend the scope of Claim 1 to be different than what is claimed.² Claim 1 is therefore definite. Further, the amendments to Claim 1 render Claim 2 definite. Withdrawal of the rejection is requested.

The obviousness rejection is traversed.

In the monomer dispersion in Claim 1, the water has a surfactant content of from 8.8% to 15% by weight of the water. Eck does not describe or suggest, and “teaches away”³ from this claim feature.

Eck, at column 6, lines 28-30, describes “[t]he emulsifiers [e.g., surfactants] are...employed in an amount of 0 to 6% by weight, based on the total weight of the monomers.” In Claim 1, the monomer dispersion is an aqueous dispersion, wherein the amount of water, relative to the amount of monomer present prior to polymerization, is given in a monomer:water weight ratio. When the monomer:water weight ratio is 55:45, the amount of monomer can be 55 g and the amount of water would be 45 g. The lowest possible amount of surfactant in the water is 8.8% by weight of the water. $8.8\% * 45\text{ g} = 3.96\text{ g}$ surfactant. The percent of surfactant present, based on the total weight of the monomer, would be $(3.96\text{g} / 55\text{g}) * 100\% = 7.2\%$. 7.2% surfactant, based on the total weight of the monomer, is greater than the maximum amount of surfactant allowed by Eck (e.g., 6%). Accordingly Eck, does not describe or suggest all of the features of present Claim 1 and the claims depending therefrom, and “teaches away” from a Claim 1 feature. The calculations and arguments above apply to Claim 7, substituting monomer with polymer precursor stage. Withdrawal of the obviousness rejection is requested on this basis alone.

¹ See 35 § U.S.C. 112, second para.

² See M.P.E.P. 2173.04 (“If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph”).

³ See M.P.E.P. § 2144.05(III). (“A *prima facie* case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the claimed invention”).

Additionally, Applicants traverse the obviousness rejection on the basis of superior and unexpected results. Examples 1-3, Table 1, specification page 9, are representative of present Claims 1 and 7 and the claims depending therefrom.

Table 1, specification page 10, is reproduced below:

Table 1:
Results of adhesion testing

Substrates coated with polymer dispersion from	Substrate				Test criterion
	Al	Glass	PVC	Concrete	
Comp. Ex. 1	--	--	+-	++	Adhesion
Comp. Ex. 2	+-	+	+-	++	Adhesion
Example 1	oo	oo	++	++	Adhesion
Example 2	+-	+	++	++	Adhesion
Example 3	--	+	++	++	Adhesion

Evaluation scale: (++ very good)(+- good)(-- poor) (oo very poor)

In Table 1, representative Examples 1-3 (of the claimed inventive embodiments) displayed improved adhesion to PVC relative to Comparative Examples 1 and 2 (not of the claimed inventive embodiments). Eck does not describe or suggest improved adhesion to PVC. Accordingly, this superior result, based on the disclosure of Eck, is an unexpected result.

Table 2, specification page 11, is reproduced below:

Table 2:
Results of elasticity testing

Substrates coated with polymer dispersion from ...	Substrate				Test criterion
	Al	Glass	PVC	Concrete	
Comp. Ex. 1	oo	oo	oo	oo	Elasticity
Comp. Ex. 2	+-	+-	+-	+-	Elasticity
Example 1	++	++	++	++	Elasticity
Example 2	+-	+-	+-	++	Elasticity
Example 3	+-	+-	+-	++	Elasticity

Evaluation scale: (++ very good) (+- good) (- poor) (oo very poor)

As shown in Table 2, representative Examples 1-3 (of the claimed inventive embodiments) displayed improved elasticity when adhered to concrete relative to Comparative Examples 1 and 2 (not of the claimed inventive embodiments). Eck does not describe or suggest improved elasticity when adhered to concrete. Accordingly, this superior result, based on the disclosure of Eck, is an unexpected result.

Applicants submit the superior and unexpected results of improved adhesion to PVC and improved elasticity when adhered to concrete are exactly the type of secondary considerations envisioned by the M.P.E.P. to address a *prima facie* case of obviousness. Withdrawal of the obviousness rejection is requested.

Applicants submit the present application is now in condition for allowance. Early notification to this effect is earnestly solicited.

Respectfully submitted,

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